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DOCUMENT-IDENTIFIER: US 6704445 B1

TITLE: Spike tolerant histograms

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INVENTOR-INFORMATION:

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ABSTRACT:

A computer system is provided such that histograms are displayed in a histogram window according so that a spike in the histogram that is significantly larger than the other histogram values is not used as the scaling factor for displaying the histogram. Rather, a histogram value other than the largest histogram value is used to scale the histogram in the histogram window. Consequently other peaks in the histogram are emphasized in the display and the largest peak does not dwarf the other peaks due to the scaling used to fully represent the largest peak.

23 Claims, 8 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 7

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Detailed Description Text - DETX (4):

An example graphical user interface will now be described in connection with FIG. 2A. Both the input **histogram** 108 and output **histogram** 112 are organized in a window on the display 114 with the control display 122. This example display may be used to illustrate **histograms** for component video data such as red, green, blue and master color video data. Component video data in other color spaces such as YCrCb and HSL also may be represented using this interface. In FIG. 2A, an input region 200 illustrates the input **histogram**. An output region 202 illustrates the output **histogram**. A control region 204 provides a mechanism through which the color correction parameters 106 (FIG. 1) may be set. In this example, the control region 204 displays three control points 206, 208 and 210 that are controlled by a user to set a white point, gray point and black point, respectively. For example, the position of these control points on the **display** may be controlled using conventional techniques using a cursor control device, such as a mouse, trackball, touch pad or touch **screen**. Numerical values associated with these control points may be

displayed, such as shown at 212 and 214. These values also may be shown graphically and in association with the **histogram** regions 200 and 202 such as shown at 216 and 218. These control points are translated using conventional techniques into color correction parameters 106 for red, green and blue video levels to be used by the color corrector 100.

Current US Original Classification - CCOR (1):
382/168